FIG.1

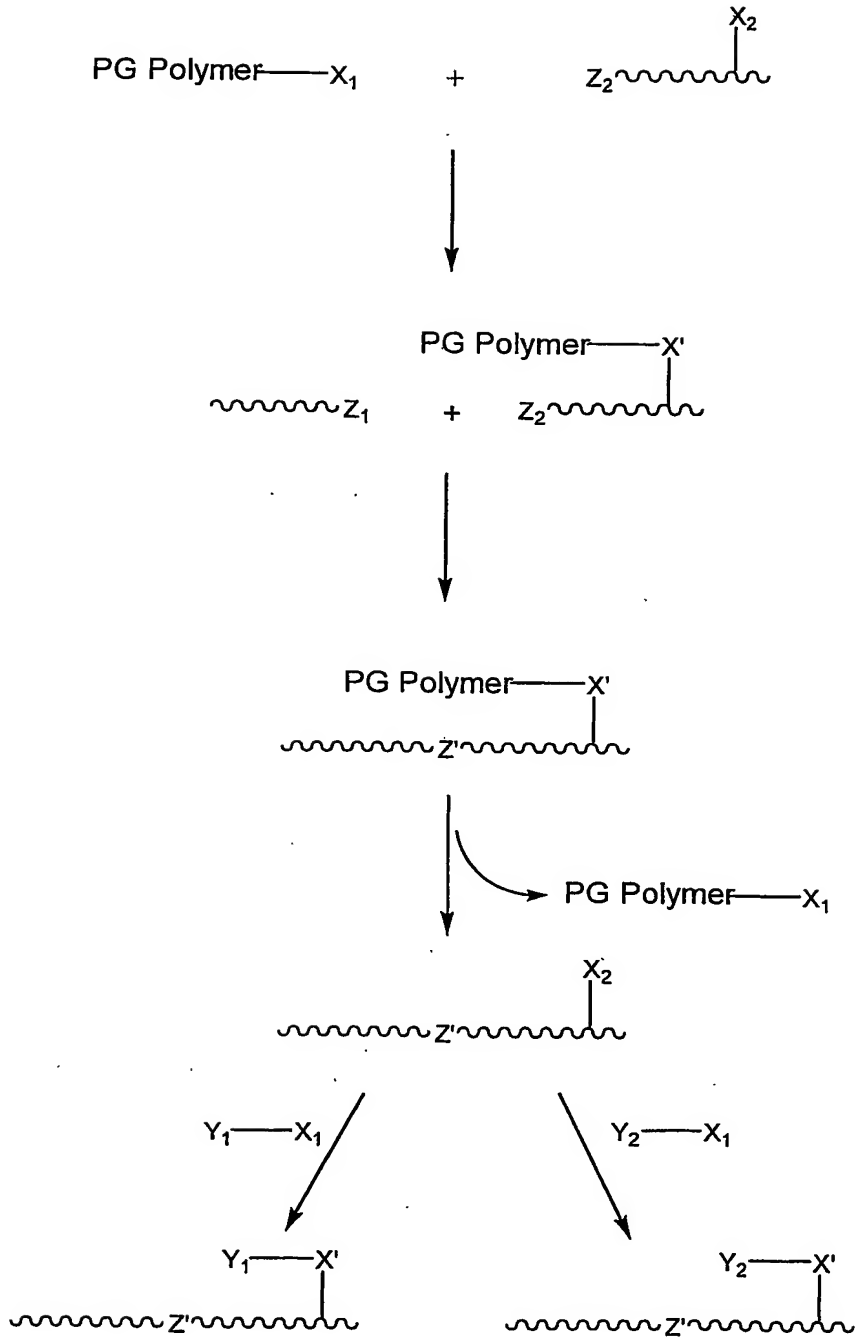

PG Polymer—X1
+
X2
Z2
PG Polymer—X'
Z1
+
Z2
PG Polymer—X'
Z'
PG Polymer—X1
X2
Z'
Y1—X1
Y2—X1
Y1—X'
Z'
Y2—X'
Z'

FIG.2

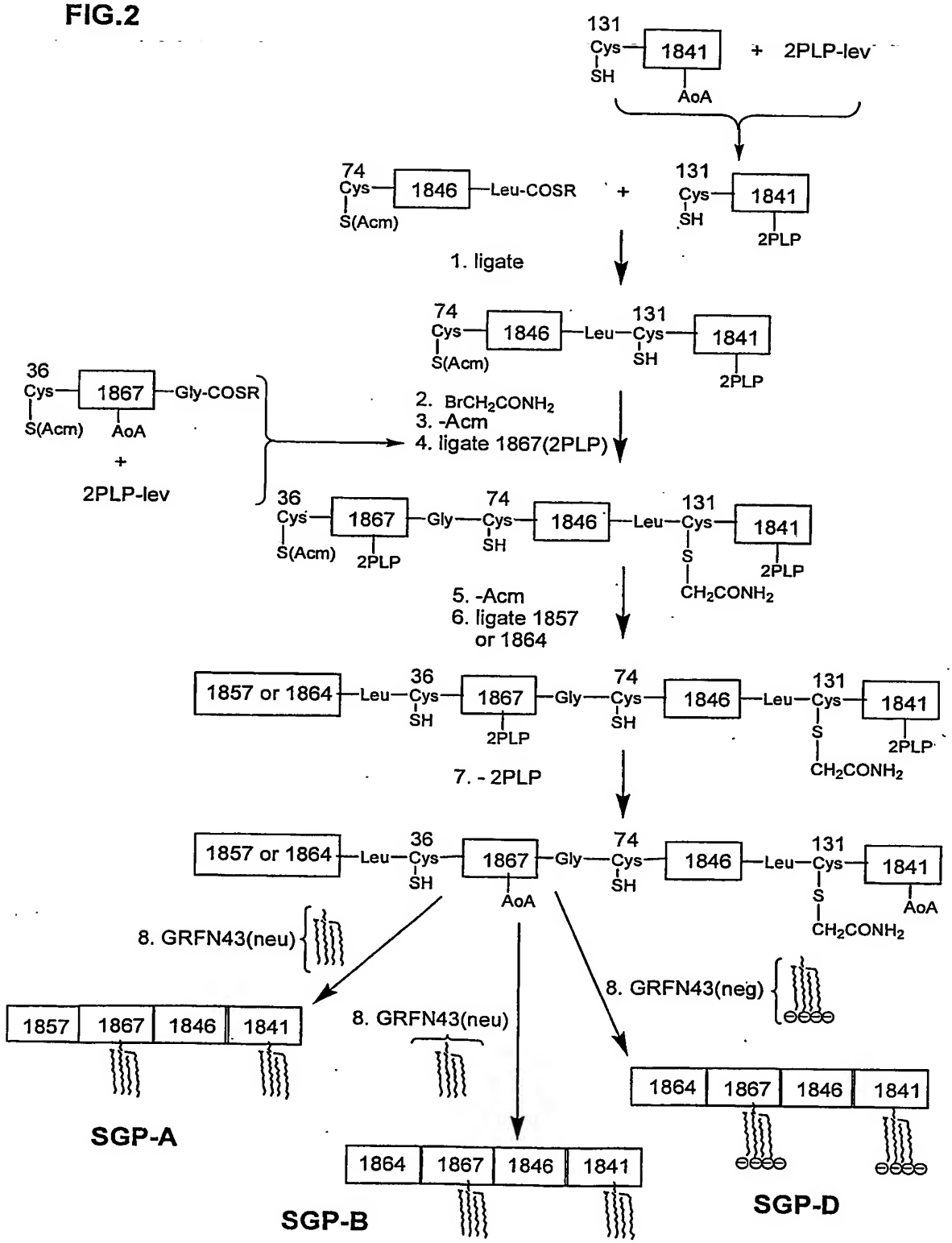
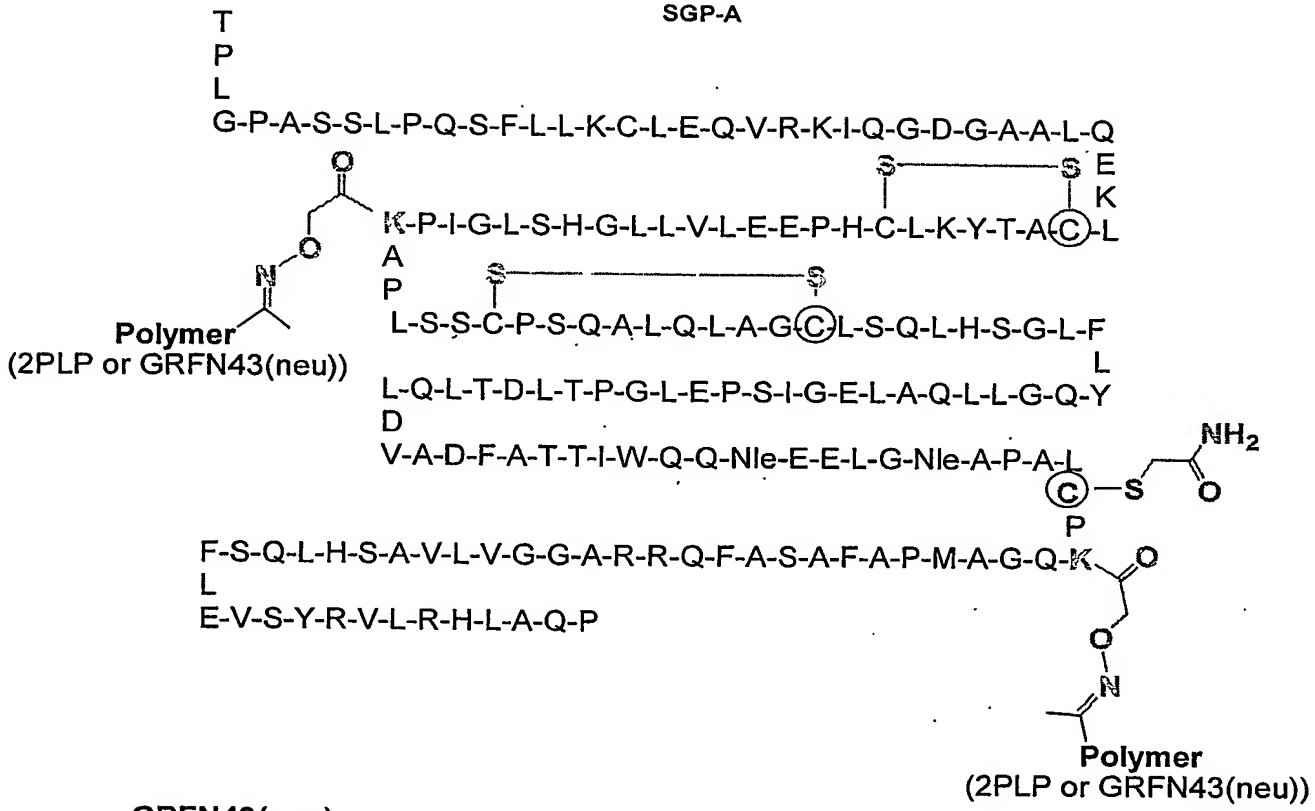
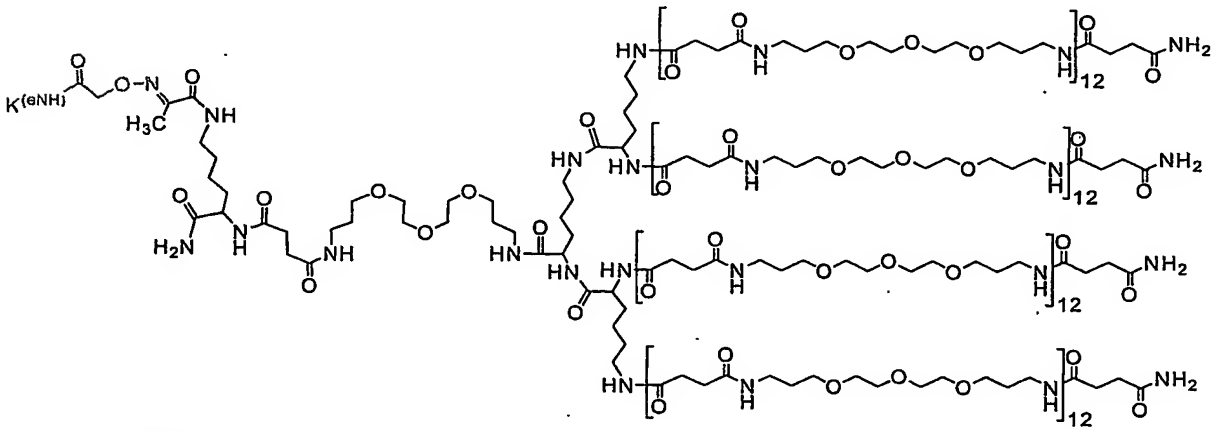

131 Cys SH 1841 AoA + 2PLP-lev
74 Cys S(Acm) 1846 Leu-COSR + 131 Cys SH 1841 2PLP
1. ligate
74 Cys S(Acm) 1846 Leu 131 Cys SH 1841 2PLP
36 Cys S(Acm) 1867 AoA Gly-COSR + 2PLP-lev
2. BrCH2CONH2
3. -Acm
4. ligate 1867(2PLP)
36 Cys S(Acm) 1867 2PLP Gly 74 Cys SH 1846 Leu 131 Cys S CH2CONH2 1841 2PLP
5. -Acm
6. ligate 1857 or 1864
1857 or 1864 Leu 36 Cys SH 1867 2PLP Gly 74 Cys SH 1846 Leu 131 Cys S CH2CONH2 1841 2PLP
7. - 2PLP
1857 or 1864 Leu 36 Cys SH 1867 AoA Gly 74 Cys SH 1846 Leu 131 Cys S CH2CONH2 1841 AoA
8. GRFN43(neu)
8. GRFN43(neu)
8. GRFN43(neg)
1857 1867 1846 1841
SGP-A
1864 1867 1846 1841
SGP-B
1864 1867 1846 1841
SGP-D

FIG.3



GRFN43(neu)



2PLP

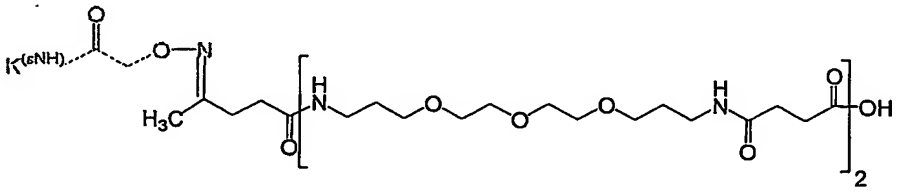


FIG.4

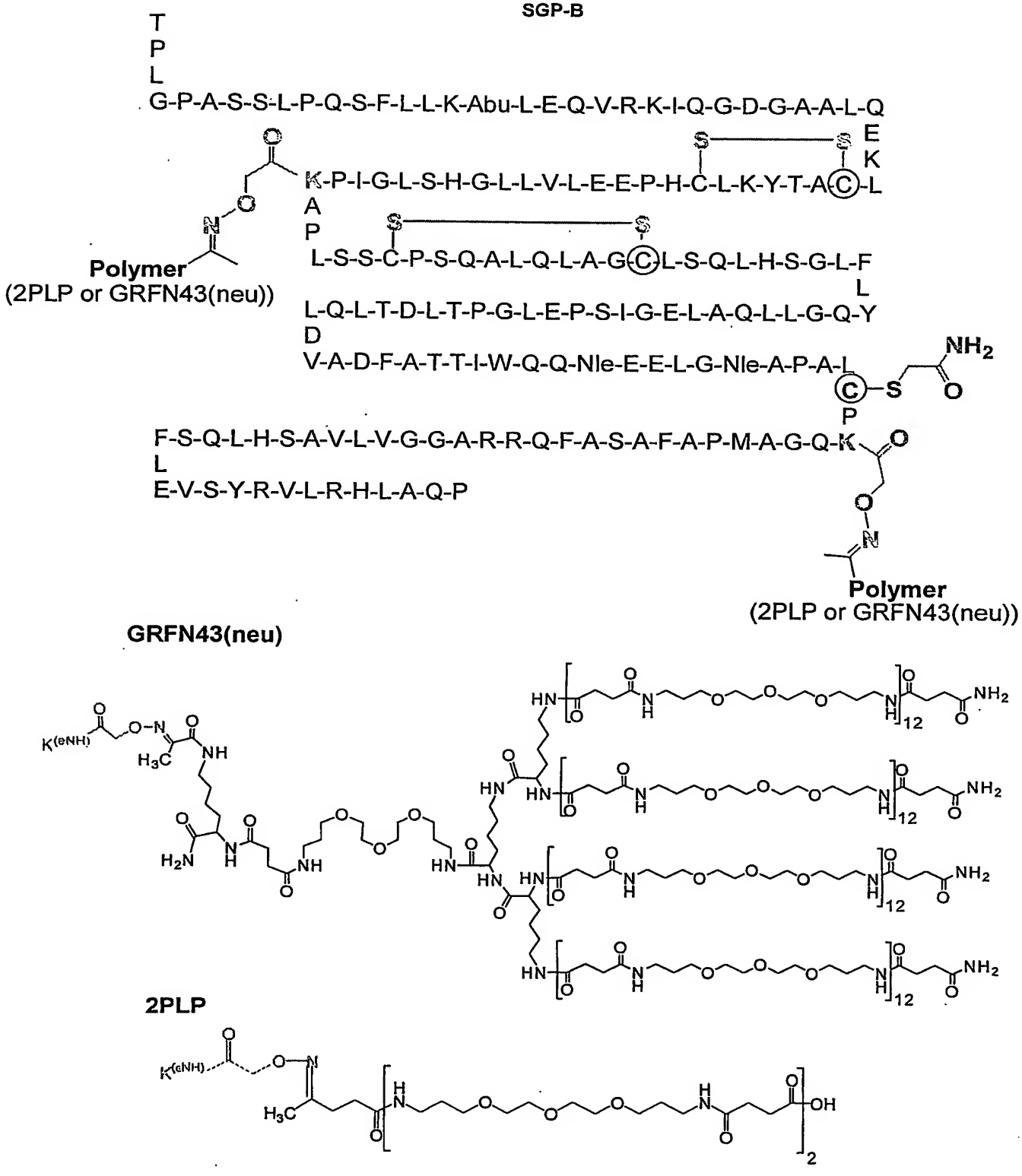
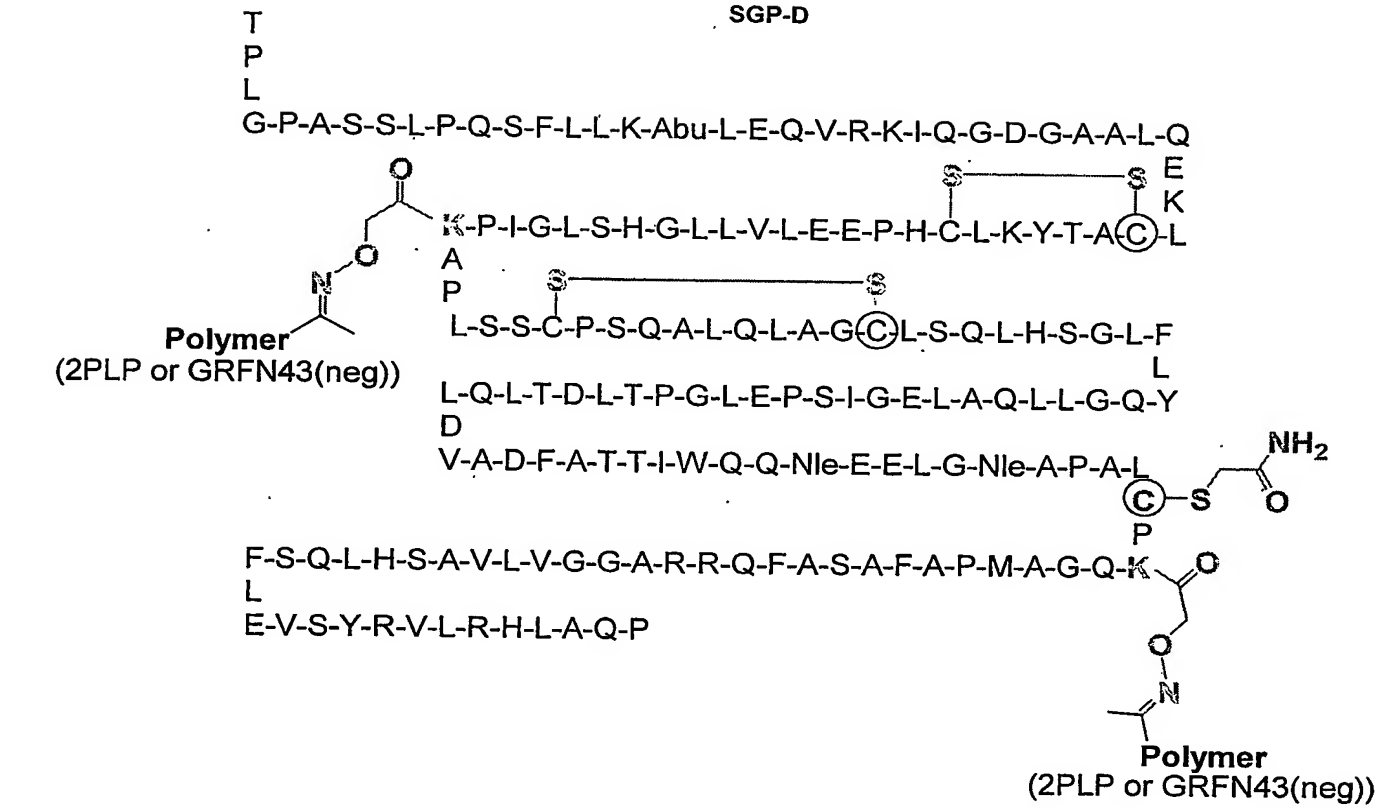
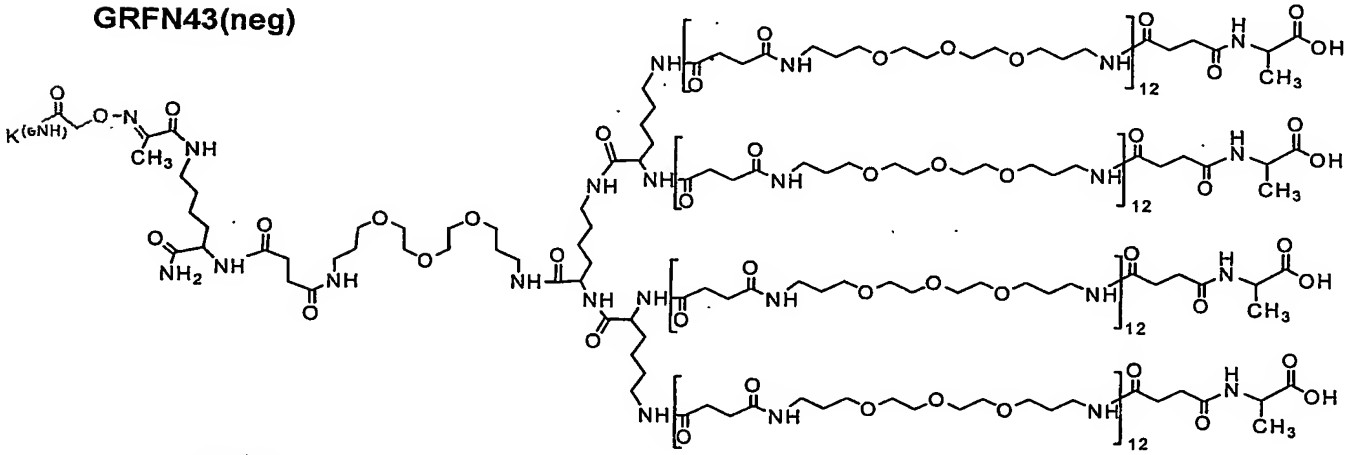
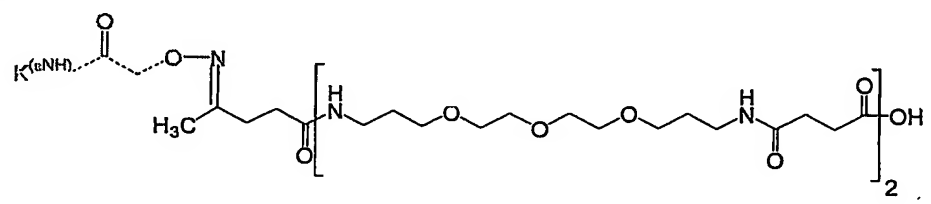

SGP-B
T
P
L
G-P-A-S-S-L-P-Q-S-F-L-L-K-Abu-L-E-Q-V-R-K-I-Q-G-D-G-A-A-L-Q
E
K
K-P-I-G-L-S-H-G-L-L-V-L-E-E-P-H-C-L-K-Y-T-A-C-L
A
P
L-S-S-C-P-S-Q-A-L-Q-L-A-G-C-L-S-Q-L-H-S-G-L-F
L
L-Q-L-T-D-L-T-P-G-L-E-P-S-I-G-E-L-A-Q-L-L-G-Q-Y
D
V-A-D-F-A-T-T-I-W-Q-Q-Nle-E-E-L-G-Nle-A-P-A-L
P
F-S-Q-L-H-S-A-V-L-V-G-G-A-R-R-Q-F-A-S-A-F-A-P-M-A-G-Q-K
L
E-V-S-Y-R-V-L-R-H-L-A-Q-P
Polymer
(2PLP or GRFN43(neu))
Polymer
(2PLP or GRFN43(neu))
GRFN43(neu)
2PLP

FIG.5


SGP-D
T
P
L
G-P-A-S-S-L-P-Q-S-F-L-L-K-Abu-L-E-Q-V-R-K-I-Q-G-D-G-A-A-L-Q
E
K
K-P-I-G-L-S-H-G-L-L-V-L-E-E-P-H-C-L-K-Y-T-A-C-L
A
P
L-S-S-C-P-S-Q-A-L-Q-L-A-G-C-L-S-Q-L-H-S-G-L-F
L
L-Q-L-T-D-L-T-P-G-L-E-P-S-I-G-E-L-A-Q-L-L-G-Q-Y
D
V-A-D-F-A-T-T-I-W-Q-Q-Nle-E-E-L-G-Nle-A-P-A-L
NH2
C
S
O
P
F-S-Q-L-H-S-A-V-L-V-G-G-A-R-R-Q-F-A-S-A-F-A-P-M-A-G-Q-K
L
E-V-S-Y-R-V-L-R-H-L-A-Q-P
Polymer
(2PLP or GRFN43(neg))
Polymer
(2PLP or GRFN43(neg))


GRFN43(neg)


2PLP